Since the winter of 1975-76, most of the herd has wintered on the National Elk Refuge. After discovering supplemental feed for elk in 1980, the Refuge staff has liberally fed bison to keep them away from elk feed lines and to reduce human/bison conflicts.

Herd growth increased greatly after 1980, and management efforts on the Refuge were effectively stopped by litigation. Samples collected in the late 1980s revealed that the bison had been infected with brucellosis.

Since 1990, the herd has increased by approximately 10-14% annually. The Wyoming Game and Fish Department reinitiated hunting outside the refuge and Grand Teton National Park in 1998, but few bison have been killed because the animals stay within park and refuge. Harvests have ranged from a low of 4 in 1998 to a high of 47 in 2002, with an average of 40-50 per year from 2001-2004.

Bison are counted annually in winter. In February 2006, 1,000 were counted on feed lines at the National Elk Refuge.

#### Disease

Between 57% and 84% of the bison herd has tested positive for the

bacterial disease brucellosis based on small, nonrandom samples. These percentages indicate that antibodies are present from previous exposure,



not active infection. Research has shown that a much smaller percentage harbor active infections.



Disease testing in Yellowstone National Park. Brucellosis is a bacterial infection that affects the reproductive system. After infection, cow bison will frequently abort their first calf. Bison, cattle, elk and

other species including humans may be infected.

Brucellosis was once widespread in American cattle herds; an aggressive eradication campaign, begun in the 1930s, has nearly eliminated the disease from domestic livestock. The Greater Yellowstone Ecosystem bison remain a brucellosis source, resulting in a highly publicized debate over wildlife disease management.

#### For more information contact:

National Elk Refuge U.S. Fish & Wildlife Service PO Box 510 Jackson, WY 83001 307/733-9212 http://www.fws.gov/nationalelkrefuge/





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# U.S. Fish &Wildlife Service

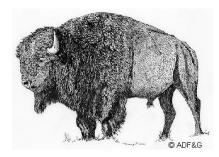
# National Elk Refuge

The American Bison



#### History

Misnamed "buffalo by European settlers, the American bison once roamed throughout North American in numbers of more than 60 million. In the late 19<sup>th</sup> century, the bison were exterminated as a government strategy to defeat the Native Americans who depended on the bison for food, clothing, and shelter. By 1900 only 1,000 bison remained in North America. Today, approximately 65,000 free ranging bison inhabit national parks and national wildlife refuges in North America.



## **Natural History**

The American Bison is the largest land mammal in North America. Their characteristics include: a dark brown body, a massive head with shaggy beard, long shaggy hair on their shoulders and front legs, a high hump on the shoulders, and a medium length tail with a tuft at its end. African buffalo weigh about half as much as the American Bison.

Short, black, curved horns are formed of modified hair and Keraton, the same material fingernails and form around a bony base and grow continuously on both males and females and are never shed. A cross-section of the horn is circular. This differs from buffalo

in other parts of the world whose horn's cross-section is triangular.



Wallowing Bison

Bison primarily graze, feeding on grasses and sedges in open meadows and prairies. In the winter they dig through the snow to forage. Bison use their massive head

and shoulder hump muscles to sweep aside the snow by moving their head from side to side.

Bison are good swimmers and fast runners, running in excess of 30 mph. They are especially active in early morning and late afternoon. Bison are gregarious. In spring, the cows and calves band together in small groups as do the bulls. In winter, bands may join to form herds, sometimes in excess of several thousand animals.

The breeding season begins in mid-July and peaks during August. Older bulls join large groups of cows and younger bison. Bison bulls display and fight each other as they compete for access to receptive females. Bison breed in late summer and early fall.



Bison Calf

Usually one red calf is born in spring after gestation period of about 9 months. Cows leave the herd to give birth in seclusion. Calves can walk within a few hours. Calves are typically born beginning in the mid-April. Most births occur in May and June, and 95% are completed by the end of July.

Wolves and grizzlies are the chief predators of bison and feed on weakened and young individuals, although bison are very effective at fending off potential predators. Bison can be found throughout the Greater Yellowstone Ecosystem.

Wolves surround a bison.



**Bison Viewing** 

In Yellowstone National Park large herds can be viewed in the Hayden Valley, Lamar Valley and along the Firehole River. In Grand Teton National Park, bison summer in the Potholes, Elk Ranch and Antelope Flats areas. Yellowstone bison winter in the lower regions of the same valleys where they summered and can also be found near thermal features. Jackson Hole bison migrate to the National Elk Refuge for the winter where they eat supplement alfalfa provided for the elk.

#### Safetv

Bison are dangerous and unpredictable, sometimes charging and goring humans who approach too closely. Always observe these majestic animals from a distance and from inside your vehicle.

Bison are aggressive year round.



### Jackson Bison Herd

Bison are native to Jackson Hole. Prehistoric remains have been found throughout the valley. Historical numbers are unknown, but at least one reference describes an observation of "a large herd of buffalo in the valley" during June 1833. Bison were mainly extirpated from the Jackson Hole and Greater Yellowstone area by the mid-1880s. A small number remained in Yellowstone National Park.

In 1948, 20 Yellowstone bison were brought to the Jackson Hole Wildlife Park near Moran. The small herd varied in size and, by 1968, was down to 11 adults and 4 or 5 calves; all of the adults tested negative for the bacterial disease brucellosis. Later that year, the entire herd escaped from the wildlife park. The bison were eventually allowed to free-range in 1969.